BERMUDA

REPORT

of the

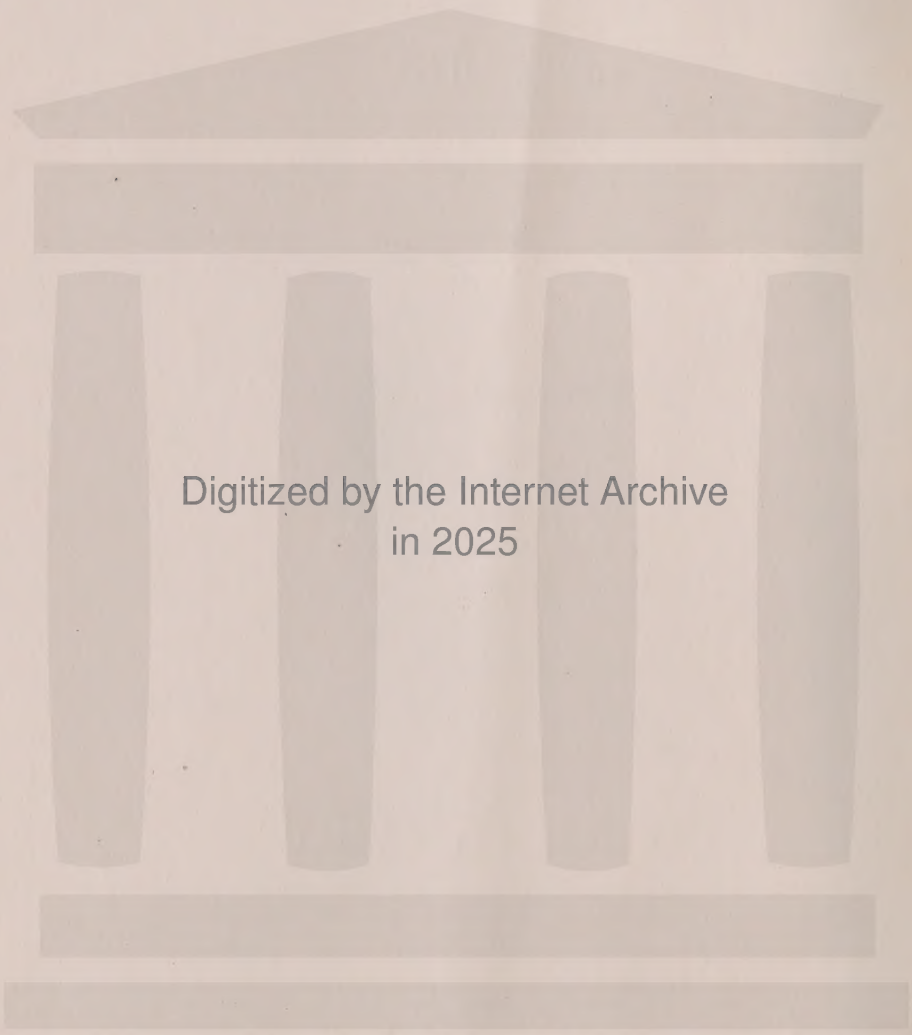
DIRECTOR

of

AGRICULTURE

for the year

1946



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Report of Director of Agriculture, 1946

The Chairman,
Board of Agriculture,

I have the honour to present, to you and to your Board, a report on the activities of this Department for the year 1946.

1. AGRICULTURE IN 1946

Food during 1946, continued to be in meagre supply in many countries of the world; of the countless factors contributing to this condition, a few may be detailed:— Shortage of seed, breeding stock, fertilizers, machinery, labour and capital.

2. BERMUDA AGRICULTURE IN 1946

During the period under review the Board of Agriculture sustained its policy of maintaining food production at 1945 levels. Weather conditions militated, to some extent, against optimum production. 58.44 unequally distributed inches of rain fell during the year. A windy, dry spring reduced crop yields, especially tomatoes. Heavy dews, recorded in March, provided an environment favourable to the spread of potato blight *(Phytopthora infestans)*. April was wet. The summer months brought considerable and unseasonal precipitations which, though potentially extending the normal growing season, caused loss to tomato and other fruit crops. Early Autumn was wet and accompanied by an unusual outbreak of fireworms *(Xylomiges eridania)* which seriously defoliated many crops.

October was dry and affected the yields at harvest of Irish potatoes.

Crop yields were adversely affected by shortage of artificial fertilizers; no castor pomace could be obtained for the 1946 plantings; nitrogenous and other mineral fertilizers were available in small quantities only.

The cost of Agricultural production increased during the year; Agricultural labour is scarce and expensive when compared with pre-war years. Animal feeding stuffs were expensive and the supply was both short and erratic. Milk, pork and egg production was reduced accordingly.

In spite of a reduction in Military and Naval personnel on The Island, a fairly easy market was available for Agricultural produce.

The continued practice of selling, for building purposes, Agricultural land, is extremely short-sighted and would seem not to be in the best interests of these Islands.

3. PRODUCTION AND MARKETING

Labour

Labour and production are indivisible, and the shortage of competent Agricultural labour at a reasonable price, remains the greatest single problem confronting the Bermuda Farmer.

During 1946 The Board of Immigration collaborated with the Board of Agriculture in the administration of contract Agricultural Labour. This gesture by the Board of Immigration has been acknowledged by the Agricultural community.

In 1947 it is proposed, with the sanction of the Board of Immigration, to import additional Agricultural labour. It is believed that Agriculture could absorb about eighty additional contract workers.

The problem of maintaining in good condition private estates, though not strictly an Agricultural problem, merits consideration. Here again labour and its shortage is the common problem. It is suggested that owners of estates obtain, individually, their own labour requirements by contracting with suitable labour probably from the Azores. If this procedure were adopted a contract worker would enter Bermuda for a specific occupation, e.g. Agricultural worker or groundsman and would not be allowed to change from one occupation to another. By this means, there would be a reasonable prospect of satisfying labour requirements, and at the same time of stabilizing labour movement and labour costs. There is room for improvement in the methods of labour management adopted by some Bermuda farmers; a contract is a legal obligation between *two* parties.

Machinery

In 1946, due, in part, to the stress of labour trouble, many farmers in Bermuda considered the possibilities of more mechanical farming. An interest was shown in the small market-garden type of tractor and in milking machines.

There are many types of small tractors on the market. In the past such as have been tried in Bermuda have not proved too satisfactory; on our light, hilly soils, wheel-spin in small tractors is almost inevitable. On the other hand, the more modern tractor, especially small track-laying types, have many good points.

The small farmer should, however, be on his guard against over-capitalisation.

In Bermuda a farmer should have not less than 10 acres of arable land before he considers buying a tractor and mechanised equipment.

The Department operated, on a hire basis, Agricultural machinery. Some of this machinery is now out of date. The Board have authorized the purchase of replacements and additional modern equipment.

The use of Department spraying equipment is extensive; the following spraying was done in 1946:—

Spraying	farm crops	— 1,467	working hours
"	cedar trees	— 1,134	" "
"	citrus "	— 477	" "
"	estates	— 153	" "

250 acres of land were cultivated by the Department for farmers.

Department transport consists of:—

2--three-ton trucks on which sprayers are mounted.

1—$\frac{3}{4}$-ton truck used for spraying and general trucking.

1—Austin van used by all officers of the Department for official visits to farms, schools, citrus orchards and estates.

1—Bradford van for the use of the Horticulturist in connection with citrus spraying.

All motor transport was kept in good order during the year.

Transportation for the officers of the Department on official visits is a problem of increasing magnitude. It is to be hoped that additional, appropriate transportation will be provided in the immediate future.

Supplies

Supplies of raw materials such as fertilizers and feeding stuffs were erratic in 1946 and some fertilizers such as castor pomace were unobtainable.

Production of all market garden crops were depressed by the short supplies of fertilizers, and milk and egg production was adversely affected by the erratic supplies of feeding stuffs.

Marketing

Government stabilised prices to the producer, wholesaler and retailer of locally grown agricultural produce, were maintained during the year. The War Time Supplies Commission co-operated with the Board of Agriculture so that imports of agricultural produce were regulated to suit local requirements without causing hardship to the consumer.

In the report of the Director of Agriculture for 1945 the following remarks were written relative to cold storage:—

"The absence in Bermuda of extensive and cheap cold storage for farm produce is, without doubt, the greatest single deficiency in our agricultural economy". Nothing, of consequence, has been done to modify this point of view. The obstacles in the way of progress are, no doubt, great but the needs of agriculture for cold storage are greater.

Government Cold Storage

The Department of Agriculture operates 18,000 cubic feet of cold storage divided into 6 chambers. This does not accommodate all the farmers' requirements for cold storage space; consequently, there are complaints of unfair allocation of available space. It should be remembered that local Agricultural produce bought by this Department for resale is also kept when necessary in cold storage.

The answer to this problem is additional Government cold storage.

For 1946 the following were the monthly receipts for Government cold storage:—

	£.	s.	d.
January	7.	5.	9.
February	11.	15.	0.
March	37.	12.	0.
April	58.	11.	2.
May	84.	3.	0.
June	113.	14.	7.
July	243.	12.	0.
August	253.	0.	0.
September	83.	13.	0.
October	43.	10.	10.
November	113.	3.	0.
December	149.	3.	0.
	£1,199.	18.	10.

The Department purchased surplus seed and ware potatoes and put them in cold storage at Messrs. Pearman, Watlington & Company, Elbow Beach Hotel, and at the Government Marketing Centre. There was practically no loss through wastage.

1,800 bu. crates (ware) stored at Elbow Beach.
1,200 bu. crates (ware) stored at Pearman, Watlington & Co.
1,100 bu. crates (seed) stored at Marketing Centre.

Government Wholesale Marketing Centre

There is recorded a decrease in the volume of business at the Government Wholesale Marketing Centre. This may be due to two main causes—the continued rise in the general cost of living and the decrease in total population. There has been a reduction in the Service Personnel in Bermuda: this reduction should be negatived by an increased tourist population.

The general monthly figures for purchases and sales are given below:—

	Purchases.			*Sales.*		
1946:	£.	s.	d.	£	s.	d.
January	843.	17.	3.	884.	7.	9.
February	967.	19.	7.	767.	4.	10.
March	1060.	5.	0.	1354.	7.	10.
April	1258.	6.	7.	921.	3.	2.
May	1344.	15.	7.	1325.	18.	0.
June	4130.	18.	7.	1423.	3.	6.
July	985.	0.	2.	2858.	5.	2.
August	513.	18.	6.	1720.	8.	7.
September	247.	4.	5.	791.	7.	3.
October	225.	12.	10.	286.	10.	0.
November	183.	11.	11.	201.	2.	5.
December	215.	6.	10.	103.	18.	11.
	£11,976.	17.	3.	£12,602.	14.	3.

Varieties and Quantities of Produce handled during the year 1946 are as follows:

Beans	4,620 lbs.	Onions—Spring	43 doz.
Broccoli	737 lbs.	Onions	28,935 lbs.
Beets	3,462 bchs.	Irish Potatoes	1,117 brl.
Cabbage	22,893 lbs.	Irish Potatoes	5,330 crts.
Carrots	31,953 lbs.	Irish Potatoes (seed)	4,114 crts.
Carrots	7,650 bchs.	Sweet Potatoes	14,629 lbs.
Cauliflower	4,238 lbs.	Pumpkin	11,778 lbs.
Corn	55 doz.	Squash	1,967 lbs.
Celery	121 crts.	Turnips	9 doz.
Cantaloupes	8,214 lbs.	Turnips (Swede)	2,375 lbs.
Eggs	496 doz.	Tomatoes	24,975 lbs.
Lettuce	2,537 doz.	Water Melon	16,714 lbs.

A review of the monthly availability of produce is shown:-

Monthly Report On Quality and Quantity of Produce Available During 1946

January: During this month there was a noticeable shortage of the following vegetables

Cabbage, Broccoli and Beets. This shortage was due to the loss of early seedlings caused by the ravages of the Cut Worm. The quality of Lettuce was very poor. Tomatoes were plentiful and of good quality.

February: Small quantities of Cabbage appeared on the market; the supply of Beets was still scarce. Celery began to appear at this time but proved to be of very poor quality. There was a shortage in the supply of Sweet Potatoes. The supply of Irish Potatoes was insufficient.

March: During this month it was noted that the supply of Tomatoes, Cabbage and Cauliflower had increased, but Swedish Turnips (Ruta-Baga) were still scarce. On the 23rd of the month a few of the Spring crop of Irish potatoes appeared on the market.

April: By the 10th of this month the supply of Irish Potatoes had increased to the point where they were being freely offered on the Market. Quantities of Carrots and Celery of very good quality, were purchased and placed in Cold Storage.

May: The supply of Swedish Turnips increased considerably and a quantity was purchased and put in Cold Storage. Lettuce became plentiful and there was a good demand for it. Quantities of Beets were purchased for Cold Storage. String Beans and Cucumbers appeared on the market in small quantities and Tomatoes were plentiful.

June: Large supplies of Potatoes and Onions were obtained and sold to Outerbridge & Company for shipment to the West Indies. This department shipped 200 bags of Carrots to the West Indies.

July: During this month there was a good supply of Canteloupes and Watermelons, also there was a small quantity of corn available.

August: Canteloupes and Watermelons became plentiful and there were small stocks of Squash and Peppers.

September: There was an increase in the supply of Sweet Potatoes, String Beans and Tomatoes.

October: There was a good demand for Cold Storage Carrots.

November: Beans, Cauliflower and Sweet Potatoes were available in small quantities but the demand far exceeded the supply. The quality of new Carrots improved and the supply became more plentiful.

December: Large quantities of Pumpkin were always available. The supply and condition of Sweet Potatoes dropped off considerably toward the latter part of this month. In late December the supply of Tomatoes far exceeded the demand.

Further statistics for general Agriculture in Bermuda were collected for another purpose, but are included here for general interest:—

OTHER AGRICULTURAL PRODUCE

A. Market Gardens Production and Values

Commodity	Area Under Crop in Acres	Average Yield per Acre in lbs.	Total Yield in lbs.	Unit Value	Farm Value
Beans	60	4,000	240,000	1/-	£12,000
Beets	40	12,000	480,000	4 d.	8,000
Broccoli	20	3,000	60,000	1/-	3,000
Cabbage	50	12,000	600,000	4 d.	10,000
Carrots	60	12,000	720,000	4 d.	12,000
Onions	20	10,000	200,000	6 d.	5,000
Potatoes, Irish	375	8,000	3,000,000	3 d.	37,000
Potatoes, Sweet	30	8,000	240,000	3½d.	3,500
Tomatoes	40	10,000	400,000	8 d.	13,200
Miscellaneous	40	8,000	320,000	6 d.	8,000
Bananas	85	16,000	1,360,000	5 d.	28,000
Totals	820		7.620,000		£139,700

B. Citrus Production and Values

Area Under Citrus In Acres	*No. of Trees Planted*	*Average Yield Per Tree In Dozs.*	*Total Yield In Dozens*	*Unit Value*	*Farm Value*
40	5,000	4	20,000	4/-	£4,000

Other Fruits—Not significant.

Exports

In 1946 exports of Bermuda Agricultural produce other than Easter lilies (buds and bulbs) were not significant.

49.5 acres of lilies grown by 58 growers were inspected in 1945. This acreage has almost certainly reached its peak.

Export of Bulbs

2,656½ cases Easter Lily Bulbs (Howardii & Harrisii).
108 cases Amaryllis Bulbs.
11 cases Hyacinth Bulbs.
176 cases Narcissus Bulbs.
201 cases Freesia Bulbs.
50 cases Ornithogalum Bulbs.

The general condition of all bulbs exported was very good.

4. LIVESTOCK

The following statistics are relative to livestock and livestock products in Bermuda for the year under review:—

Cows	*Heifers*	*Bulls* (including bull calves)
1163	278	59

Milk Production approximately 600,000 gallons annually.

Meat Production—Beef, 84,600 lbs; Veal, 39,625 lbs.—Total, 124,225 lbs.

Hog Population —	Sows	Boars	Fattening Pigs	Suckling Pigs
2,500	500	150	1,200	650

Pork Produced — 369,400 lbs.

Goat Population —	Grown Goats	Kids.
800	550	250

Milk Yield—Indeterminate.

Meat Yield—3,700 lbs. goat mutton.

Horse Population—750.

250 horses used whole or part time for farm work.

3 foals were born in 1946.

DISEASES OF LIVESTOCK

Tuberculosis

During 1946 seven herds were either newly quarantined or kept in quarantine from the previous year while in two herds the quarantine was lifted. With

the first test in 1947 at least four more herds should be taken out of quarantine.

3,182 cattle were subjected to the tuberculin test during 1946 of which number 68 reacted and were condemned. One died before slaughter and 67 were slaughtered under inspection. This gives a percentage of 2.13% among the cattle for the year. During the first six months the percentage was 3.65% while during the last six months it was .28% which is a most significant drop.

A factor which has played quite an important part in the removal of latent cases of tuberculosis in cattle has been the use of the ophthalmic (eye) test in conjunction with the intradermal (tail) test and it will be the policy of the Government Veterinary Officer to continue the use of this double test in an effort to wipe out this disease among cattle.

No bulls were condemned for tuberculosis and it is worthy of note that bulls slaughtered for other reasons (e.g. old age) from quarantined herds showed in no case lesions of a tubercular nature.

Contagious Abortion (Bangs Disease, Brucellosis)

In 1946 *242 calves* (each 8 months old) were vaccinated against *Brucella abortis* with strain 19 vaccine.

Of this number 107 have been blood tested to determine whether or not vaccination was successful. The remainder will be tested in early 1947. Of the 107 samples taken 95 or 88.78% were strongly positive in reaction signifying successful vaccination.

Other Diseases

No other diseases of dairy animals were reported in significant numbers. There were a few cases of hypocalcaemia (milk fever) and mastitis.

In late October there was an outbreak in some dairy herds of an acute diarrhoea; the causal organism was not isolated nor identified but the history of the outbreak led one to suspect that the organism responsible was *Vibrio jejuni.*

Two heifers at the Agricultural Station were affected with a haemorrhagic diarrhoea probably caused by eating sweet potato leaves (Ipomoea species) which had been sprayed with Bordeaux mixture.

Hog Cholera

The annual inoculation of hogs with anti-hog-cholera serum was undertaken in the spring of 1946. Crystal violet vaccine was used in a large herd for the purpose of comparing its period of effectiveness with that of serum.

Fortunately only two small outbreaks of the disease occurred so that no definite experimental conclusions were reached. The experiment will be continued by the Government Veterinary Officer in 1947.

Coccidiosis

The Government Veterinary Officer inspected and diagnosed a severe case of *Coccidiosis* in chickens.

Horses

The horse population in Bermuda is declining due to the advent of the motor car. Improvements to the colony's roads to suit the more modern mode of transportation has caused a considerable amount of anxiety to horsemen.

The Government Veterinary Officer has successfully introduced the practice of heeling and toeing horse's shoes with Barium thus making them virtually non-skidding.

The decline in horse population is having an effect on the feeding habits of the sparrow; it is reasonably safe to predict that the sparrow in Bermuda will become an Agricultural pest of some consequence.

LIVESTOCK IMPROVEMENT

Artificial Insemination

Plans were laid down to import from the United States of America Bull semen from pedigreed animals. The Animal Husbandry Department of Cornell University under Professor Salisbury and Mr. Cecil Branton, his Assistant, co-operated with us in this venture.

A few trial shipments of semen sent Air Express by Pan American Airways, arrived in good condition. At this time, however, the Government Veterinary Officer was absent from the Colony on Duty; on his return, further shipments of semen were resumed but this arrived in a very impotent condition, due, in the main, to the time taken in transit between Ithaca, N.Y., and LaGuardia Airfield

It is proposed to resume this experiment in 1947.

Importation of Dairy Animals

Under the supervision of the Government Veterinary Officer who was sent to Canada for the purpose, 32 cows and 1 Bull mainly of the Holstein Breed, were imported into Bermuda. The production of these animals has increased the volume of milk produced. The Bull is a highly pedigreed animal.

The Board of Agriculture prepared for the Legislature Bye-Laws relative to the licensing of Bulls and Boars. These, when put on the Statute Book, should affect for the better, livestock breeding in Bermuda.

The formation of an active Milk Producers' Association in 1946 was looked upon as a significant indication that local farmers were strengthening their ranks against post-war economic uncertainties. This Association has worked closely with this Department towards improvement of the local Dairying Industry.

5. PLANT PATHOLOGY

The attention of the Plant Pathologist during 1946 was mainly directed toward the investigation and control of the two scale insects, *Diaspis visci* and *Lepidosaphes newsteadi*, attacking the Bermuda cedar (*Juniperus Bermudiana* L.).

The areas affected by these two pests increased with rapidity. It is now obvious that spraying with insecticides has no practical significance in checking the general spread of these insects, and it would be uneconomical to spend further large sums of money on spraying equipment and materials.

It has been stated that these scale insects were first discovered attacking the Bermuda cedar in 1944-45.

There can be little doubt but that these insects were present in Bermuda in considerable numbers before these dates; the history of the rise of this epidemic cannot otherwise be rationally explained.

During the year the Department, with the assistance of Mr. A. B. Dick, Jr., of Paget, Bermuda, and Chicago, Illinois, U.S.A., called in for consultation two American Entomologists—W. W. Yothers, of Orlando, Florida, and G. H. Plumb, of Connecticut Experiment Station, New Haven, Connecticut.

W. W. Yothers' report has been published by this Department. The work of Dr. G. H. Plumb has not yet been completed.

At the direction of the Board, the Plant Pathologist visited in December, 1946, the Imperial Bureau of Biological Control at Belleville, Ontario. The Director of this Organisation, Dr. W. R. Thompson, agreed to make a complete investigation of the problem, and at the present time he is in Bermuda conducting his researches.

It is reasonable to predict that the most effective and economical method of controlling these scale insects will be by Biological Control, but the success of this project depends on finding predators and parasites of the scale insects, and of establishing them effectively in Bermuda.

The cedar trees that have been defoliated by insect attack are, in many cases dead. This entails the need for reafforestation and a decision as to the species of tree to be used.

The fact that the cedar tree covers practically the whole of Bermuda is a pleasant thing, but, scientifically speaking, it is not so commendable.

A forest consisting of one type or a single stand of trees suffers badly when hit by a specific disease or pest; many diseases and pests are specific to one tree—and it would be wise when replanting the diseased areas to plant a variety of trees. Seedlings of the following species are being reared at the Department for the purpose:—Norfolk Island Pine *(Araucaria* sp.), the Whistling Pine *(Casuarina* sp.) and the Bermuda Cedar *(Juniperus Bermudiana);* other seedlings are also being cultivated.

Sylviculture

The Department maintained during 1946 a Forestry gang of about 20 men, pruning and thinning, cedar trees; this gang accomplished much good work.

The Potato Tuber Moth (Gnorimoschaema operculella)

An egg parasite (Copidosoma Kochleri) of the Potato Tuber Moth was introduced into the Colony in March and April of 1946. The shipment consisted of 53 boxes containing 38,570 parasitised larvae and were sent by W. F. Sellers from the Riverside (California) Substation of the Imperial Bureau of Biological Control.

This consignment should produce 771,400 parasites.

No recovery of this species, nor of *Microbracon gelechiae,* nor of *Chelonus phthorimaeae* (both introduced in 1945) have been made up to date.

The greatest crop losses sustained by Bermuda Farmers in 1946 were due to insect pests.

6. HORTICULTURE

Increasing interest was again shown in Citrus culture in 1946. The local Citrus Association has now over 100 members and there are now over 40 acres of land under citrus in Bermuda.

Approximately 5,000 trees are planted and the demand for further trees exceeds the supply.

In 1946 it has been estimated that 20,000 dozen of citrus fruits were harvested at an estimated farm value of £4,000.

The Department again undertook a contract to service three times each year, the orchards of all members of the Association.

In December the Association held an annual Exhibition which attracted 150 entries showing 38 varieties.

Citrus fruit grown locally found a ready local market in 1946. Lemons of the Meyer variety were exceedingly popular on the market and were superior both in quantity and quality of juice to imported types.

Grapefruit reached the market in moderate quantities but the price asked was considered by some buyers to be exorbitant.

Some concern was felt about the dirty condition of some locally grown citrus fruit offered for sale. There can be no doubt that to offer dirty fruit for sale will do much harm to the local industry.

In the not too distant future the marketing of local citrus fruits, whether it be for local consumption or for export, will present a problem.

It is essential for success that locally grown citrus be offered for sale graded and at a uniform price to the producer and the consumer. It has been suggested that all members of the Association sell their fruit through the Government Marketing Centre and there is much to commend this suggestion.

The Department encouraged the importation of other fruit trees; in particular a keen interest was shown in the importation of Avocado pear trees.

Many ornamental trees, shrubs, vines and other plants were distributed from the Station.

Farmers were offered supplies of strong seedlings of approved varieties of the staple crops.

Officers from the Department visited all the School Gardens in the Island and gave both advice and instruction in horticulture to the pupils.

The five local Agricultural scholars were given practical training in horticulture during their summer vacation.

7. Finance

A. General Statement of Expenditure is Given Below:—

Vote No.	Service	Amount of Appropriation	Total Expenditure from 1st January	Unexpended Balance	Remarks
1	Fees to Members of Board	£ 80 0 0	£ 76 8 0	£ 3 12 0	
2-8 & 11	Salaries	4,871 0 0	4,870 0 9	19 3	
7A	Assistant Horticulturist	250 0 0	237 18 1	12 1 11	Amount provided from 1/5/46 Started 13/5/46
9	Travelling allowance to Government Veterinary Officer	75 0 0	75 0 0	— — —	
10	Crop Reporters and Farm Inspectors	450 0 0	20 0 0	430 0 0	Work done by Officers of Dept.
12	Extra Clerical Assistance	887 0 0	835 17 8	51 2 4	
13	Marketing Officer	600 0 0	600 0 0	— — —	
14	Fifteen per cent bonus	642 12 0	319 10 1	323 1 11	
15	Subsistence allowance	266 0 0	130 10 0	10 0	
16	General Grant	2,200 0 0	2,199 13 8	135 6 4	
17	Inspection Services and Contingencies for local and export market	400 0 0	384 14 6	15 5 6	
18	Control of animal diseases and improvement of livestock	1,750 0 0	1,750 0 0	— — —	
19	Control of Plant diseases and pests	700 0 0	651 4 8	48 15 4	
20	Horticulture	2,000 0 0	1,987 1 5	12 18 7	
21	Government House gardens	975 0 0	963 4 8	11 15 4	
22	Departmental Contingencies, travelling expenses, telephones, lighting, etc	200 0 0	199 10 9	9 3	
23	Packing House, Services and Contingencies	100 0 0	52 4 10	47 15 2	
24	Canning Plant	5,000 0 0	4,999 5 11	14 1	
25	Cold Storage Plant Operation	1,600 0 0	1,378 14 2	221 5 10	
26	Expansion of local production of food	400 0 0	298 3 11	101 16 1	
27	Purchase, upkeep and operation of agricultural equipment	2,500 0 0	2,344 17 4	155 2 8	
28	Purchase and storage of agricultural supplies	2,000 0 0	1,367 0 3	632 19 9	
29	Purchase and storage of potatoes and other agricultural produce for resale	16,000 0 0	12,541 14 8	3,458 5 4	
30	Agricultural scholarships	800 0 0	402 16 7	397 3 5	
31	Agricultural Exhibition	500 0 0	498 0 0	2 0 0	
32	Labour and materials for treatment of cedars	9,500 0 0	8,456 6 5	1,043 13 7	
		£54,746 12 0	£47,639 18 4	£7,106 13 8	

The Department reimbursed the Treasury as follows:—

2 (b) Other receipts	£24,063.	14.	10.
2 (c) Canned Vegetables	2,735.	13.	0.
	£26,799.	7.	10.

An analysis of expenditure and receipts of the Agricultural Exhibition held in May, 1946, is given. The attendance at this event excelled all previous records. It was noted, however, that a great many entries, especially in the juvenile classes, were not of an agricultural nature.

In future, it is proposed to give this exhibition a more Agricultural bias.

B. Statement of Receipts and Payments for Agricultural Exhibition, 1946

Receipts

Imprest from Colonial Treasurer	£500	0	0			
Less wages unclaimed (re-imbursed to Vote)	3	11	6	£	496	8 6
Takings, (Gate and Enclosure)					985	15 4
Special Prize Money from Donors					22	15 0
From Adverts in Catalogue					139	0 0
From Rent of Stalls					106	0 0
Auction of Fruit, Flowers and Vegetables					21	10 6
				£	1,771	9 4

Payments

Bank Charges				£	2	14 6
Labour					628	8 6
Lumber					179	4 2
Other Supplies					125	17 3
Printing, Advertising and Stationery					264	5 7
Hire of Band and Tents					76	4 3
Purchase, Hire and Cartage of Chairs					67	15 8
Commission paid on Adverts in Catalogue					13	18 0
Prize Money					281	16 0
Donations to Charities					21	10 6
Unexpended Balance returned to Colonial Treasurer					109	14 11
				£	1,771	9 4

Bank Statement at 31st August, 1946	£145	17	2
Unpresented Cheques	36	2	3
	£109	14	11

C. Canning Plant

An analysis of production and receipts from the Canning Plant is also appended:—

	Cases of Whole Carrots	Sliced Carrots	Whole Beets	Cut Beets	Beans	Tomato Juice—Cases Cans	Tomato Juice—Cases Bottles
Stocks 1/1/46.....	—	—	—	—	—	830	8
Canned in 1946...	1025	981	11	23	54	—	—
	1025	981	11	23	54	830	8
Sold during 1946	1025	981	11	23	54	685	8
Stocks 31/12/46..	Nil	Nil	Nil	Nil	Nil	145	Nil

Whole Carrots	£	954	7 0
Sliced Carrots		903	11 6
Whole Beets		11	0 0
Cut Beets		23	0 0
Beans		67	10 0
Tomato Juice (Cans)		342	10 0
Tomato Juice (Bottles)		2	0 0
	£	2,303	18 6

8. STAFF

Dr. E. R. Earl was appointed Government Veterinary Officer—Full-time as from the 11th February, 1946.

Mrs. Thelma Smith was appointed Clerk to the Board and Director on 1st November, 1946, on the resignation, at her own request, of Mrs. N. E. Pollendine.

A. Rego was appointed Assistant Horticulturist on probation on 13th May, 1946. Rego was a holder of the Board of Agriculture's Foreign Scholarship.

Director of Agriculture:	W. J. Kinghorn, M.A. (Edin.), B.Sc. (Edin.).
Plant Pathologist:	J. M. Waterston, B.Sc. (Edin.), A.I.C.T.A.
Government Veterinary Officer:	Dr. E. R. Earl, V.S., B.V.Sc.
1st Agricultural Assistant:	W. R. Evans.
2nd Agricultural Assistant:	C. V. S. Early.
Horticulturist:	C. A. Baker
Assistant Horticulturist:	A. Rego.
Inspector of Produce:	T. A. Hollis.
Marketing Officer:	J. H. Hollis.
Accountant:	W. B. Johnstone.
Clerk to Board and Director:	T. A. Smith.
Assistant Clerk:	M. W. McDougall.
Clerk to Marketing Officer:	J. Austin.

Respectfully submitted,

W. J. KINGHORN,

Director of Agriculture.

February, 1947.